ERNEST I. SHEPPE, III, P.E.

Water Resources Engineer

Years of Experience: 36

Education:

B.S.C.E. The Johns Hopkins University, 1983

Active Registration:

Maryland Professional Engineer, 1988 (MD Reg. #16580)

Awards:

HBAM/LDC 2008 Consultant of the Year

Maryland Society of Professional Engineers Meritorious Service Award Feb. 2009

Memberships:

Maryland Society of Professional Engineers, Board of Directors, Chair SWM Committee

Qualifications:

Mr. Sheppe has extensive experience in water resources engineering and natural resources preservation, including pollutant loading estimates, Chesapeake Bay Critical Areas studies, floodplain studies, stormwater management design, erosion and sediment control, stormwater retrofit designs, dam remediation and repair, wetland restoration design, stream impact analysis, and storm drain, bridge and culvert hydraulic design. He is experienced in computer applications such as TR-20, HEC-2, HEC-RAS, and HY-8.

As part of his undergraduate studies at Johns Hopkins, Mr. Sheppe successfully completed post-graduate courses in hydrology and hydraulics. Following approximately nine years of work in land surveying and construction, Mr. Sheppe has spent more than twenty-five years working in the field of water resources engineering. This mix of education and experience gives Mr. Sheppe a unique ability to combine the application of theoretical principles with his knowledge of the realities of the work site to develop innovative solutions that are both technologically sound and practical.

Mr. Sheppe has many years of experience in the management of a variety of projects. His management experience includes leading multi-disciplinary teams of professionals in the preparation of design solutions that meet projects' goals, successfully negotiating and obtaining all necessary permits, promptly addressing problems as they may arise during construction, and ensuring that the finished project meets all regulatory requirements and accomplishes its intended purpose.

Mr. Sheppe's experience encompasses hundreds of projects and other activities. A relevant sample is provided below.

STREAM ENGINEERING / HYDROLOGY & HYDRAULIC ENGINEERING / FLOODPLAIN STUDIES

"Wetland Hydrology: A Water Balance Approach to Wetland Preservation and Impact Assessment," Owings Mills, Maryland – Project Engineer responsible for developing simplified wetland hydrology model and method, and applying it to residential development.

Tabasco Cove Wetland Restoration, Baltimore County, Maryland - As Project Engineer, prepared hydrology study and detailed designs for wetland restoration project in a severely degraded small wetland in an industrial area of southeast Baltimore County. Client: Baltimore County DEPRM.

Gwynns Falls Watershed, Baltimore County, Maryland - As Project Engineer, updated 100-year Flood Analysis for 20+ square mile watershed.

Monocacy River Floodplain Study, City of Frederick, Maryland - As Project Engineer, developed hydraulic model for designated scenic river for City of Frederick Municipal Golf Course.

STORMWATER MANAGEMENT / STORMWATER RETROFIT / DAM DESIGN AND REMEDIATION

Carrollwood Manor Retrofit Project, Baltimore County, Maryland - Engineer-In-Charge/Project Manager for an innovative stormwater management retention basin/tidal marsh retrofit project in an older residential community, in southeast Baltimore County. Client: Baltimore County DEPRM.

Woodlawn High School Stormwater Retrofit, Baltimore County, Maryland – Project Engineer/Project Manager for bio-retention facility to treat uncontrolled stormwater runoff from an older school site. Client: Baltimore County DEPRM.

Tall Trees Pond and Park, Baltimore County, Maryland – Project Engineer/Project Manager for regional stormwater retrofit pond and park to treat uncontrolled runoff from an estimated 115 acres of older urban areas in southeast Baltimore County. Client: Baltimore County DEPRM.

Martin Plaza/Aero Acres Park, Baltimore County, Maryland – Project Engineer/Project Manager for regional stormwater retrofit pond and park to treat uncontrolled runoff from an estimated 90-acre older urban watershed in southeast Baltimore County.

UTILITIES AND INFRASTRUCTURE

Frederick Municipal Golf Course, Groundwater Discharge Permit, City of Frederick, Maryland - Project Manager/Project Engineer responsible for obtaining a groundwater discharge permit for use of treated sanitary sewer effluent from municipal treatment plant to spray irrigate the golf course.

CRITICAL AREA AND POLLUTANT LOADING STUDIES

Pollutant Loading Evaluation for Marshfield Business Park, Baltimore County, Maryland (May, 1988) – Project engineer.

Critical Area Stormwater Pollutant Study for Hopkins Landing, Baltimore County, Maryland (February, 1988) – Project engineer.

Glyndon I and II Stormwater Pollutant Load Analysis, Baltimore County, Maryland (April, 1990) – Project engineer.

City of Havre de Grace, Maryland - Critical Area Program (May 2006) – Testified as expert witness before Critical Area panel regarding proposed update to the Havre de Grace critical area program.

COMMITTEES AND TESTIMONY

Baltimore County Builders for the Bay Roundtable (2005-2006) – Chair, Stormwater Subcommittee. A year-long effort by a very diverse group of citizens, County agencies, homebuilders, environmentalists and consultants tasked with reviewing the County's codes and ordinances and recommending changes that would make the County's rules more environmentally sensitive.

Delaware's Inland Bays Pollution Control Strategy (2005-2006) – Member of a diverse coalition of consultants and other interested parties assisting the State of Delaware develop regulations to reduce nutrient concentrations in Delaware's Inland Bays.

Broadkill River Tributary Action Team Steering Committee (2006) – Member of the Steering Committee assisting the State of Delaware in developing regulations to reduce nutrient and bacteria loads in the Broadkill River.

Riparian Buffers (February 20070 – in conjunction with Stuart Cohen, PhD, presented a discussion of the science of riparian buffers and the factors that influence the effectiveness of such buffers in filtering pollutants. This presentation was made before a diverse group that included the DE DNREC, local media, developers, farmers, and members of the DE legislature.

Stormwater Management Act of 2007 (March 2007) – Testimony before the Maryland Senate and House Environmental Committees (SB 784 and HB 786).

Stormwater Management Act of 2007 – Promulgation of Revised SWM Regulations by MDE (Fall 2007 – 2009) – Chair, Maryland Society of Professional Engineers Stormwater Committee tasked with reviewing draft regulations published by MDE and assisting MDE with the promulgation of new SWM regulations, model ordinance, and other documents, in accordance with the mandates of the 2007 Act. Mr. Sheppe was also a member of MDE's Redevelopment Subcommittee.

Baltimore Watershed Agreement – Committee of Principals (June 2007 – Present): Signed by Mayor Dixon and County Executive Jim Smith in December 2006, the Baltimore Watershed Agreement sets out a number of specific goals to better protect and restore watersheds that are shared by the City of Baltimore and Baltimore County. Mr. Sheppe is one of only three non-governmental members selected by County Executive Jim Smith to sit on the Committee of Principals. The duties of the Committee of Principals includes directing and reviewing the work of the subcommittees, and ultimately, vote up or down on the subcommittees' recommendations, all under the guidance expressed in the goals of the Agreement.

Delaware Stormwater Management Regulatory Advisory Committee (October 2007 – January 2009) – voting member of the RAC, Chair of the RAC Urban Considerations Subcommittee, and member of the RAC Technical Subcommittee, assisting DNREC with revisions to Delaware's SWM regulations.

Maryland's Critical Area Bill (2008 Legislative Session) – in conjunction with Stuart Cohen, PhD, offered expert testimony before both environmental committees regarding proposed revisions to Maryland's Critical Area Law. The focus of Mr. Sheppe's and Dr. Cohen's testimony was the science of riparian buffers and the factors that influence the effectiveness of such buffers in filtering commonly found pollutants in stormwater runoff.